

Message

---

**From:** Whittier, Robert [Robert.Whittier@doh.hawaii.gov]  
**Sent:** 9/13/2016 2:24:40 PM  
**To:** Linder, Steven [Linder.Steven@epa.gov]; Takaba, Richard R [richard.takaba@doh.hawaii.gov]; Frazier, William Mark [william.frazier@doh.hawaii.gov]; Pallarino, Bob [Pallarino.Bob@epa.gov]; steven.chang@doh.hawaii.gov; roxanne.kwan@doh.hawaii.gov; Shalev, Omer [Shalev.Omer@epa.gov]  
**CC:** Heu, Randall [randall.heu@doh.hawaii.gov]  
**Subject:** Re: RE: Section 6&7 Disapproval and comments (MF comment)  
**Attachments:** Section 6&7 SOW disapproval and comments 8 Sept 2016 ver 2 RT\_rbw.docx

Good Morning Steve and All,

I went through the Sect 6&7 Letter and made some suggested changes in track changes. Will work on a statement about desired qualifications for a groundwater investigation and send later this morning.

Thanks,  
Bob W>

---

**From:** Linder, Steven <Linder.Steven@epa.gov>  
**Sent:** Monday, September 12, 2016 4:26:30 AM  
**To:** Takaba, Richard R; Whittier, Robert; Frazier, William Mark; Pallarino, Bob; Chang, Steven Y; Kwan, Roxanne S; Shalev, Omer  
**Cc:** Heu, Randall  
**Subject:** RE: RE: Section 6&7 Disapproval and comments (MF comment)

Happy Monday,

I am going to work on getting this letter finalized this week. We have had the 6 & 7 plan for several months, and I do not think we should wait for Bob to get back.

Let me know ASAP if you will have additional comments. I do not think this is going to be our last attempt to comment on this work, because we are going to be asking for a significant rewrite. Additionally, I imaging we will likely spend a day discussing our comments and changes needed the week of October 3<sup>rd</sup>.

And I also understand the concerns related to the Navy needing the appropriate expertise to create a sufficiently defensible model. Without naming individual organizations or people, can we describe our suggestions for expertised needed to do the work correctly?

Thanks

Steven Linder, P.E.  
Manager, Underground Storage Tanks Program  
US EPA Region 9  
415-972-3369  
linder.steven@epa.gov

---

**From:** Takaba, Richard R [mailto:richard.takaba@doh.hawaii.gov]  
**Sent:** Friday, September 09, 2016 2:48 PM

**To:** Whittier, Robert <Robert.Whittier@doh.hawaii.gov>; Frazier, William Mark <william.frazier@doh.hawaii.gov>; Pallarino, Bob <Pallarino.Bob@epa.gov>; Linder, Steven <Linder.Steven@epa.gov>; steven.chang@doh.hawaii.gov; roxanne.kwan@doh.hawaii.gov  
**Cc:** Heu, Randall <randall.heu@doh.hawaii.gov>  
**Subject:** RE: RE: Section 6&7 Disapproval and comments (MF comment)

Thanks Bob W, agreed. Sorry about #2 let's edit as much as possible tho before Bob P comes back.

And maybe make a separate list of statements they made that illustrate our lack of confidence in their level of understanding.

Rich

---

**From:** Whittier, Robert  
**Sent:** Friday, September 09, 2016 8:24 AM  
**To:** Takaba, Richard R <richard.takaba@doh.hawaii.gov>; Frazier, William Mark <william.frazier@doh.hawaii.gov>; Pallarino, Bob (Pallarino.Bob@epa.gov) <Pallarino.Bob@epa.gov>; Linder, Steven (Linder.Steven@epa.gov) <Linder.Steven@epa.gov>; Chang, Steven Y <steven.chang@doh.hawaii.gov>; Kwan, Roxanne S <roxanne.kwan@doh.hawaii.gov>  
**Cc:** Heu, Randall <randall.heu@doh.hawaii.gov>  
**Subject:** Re: RE: Section 6&7 Disapproval and comments (MF comment)

Rich,

Good job on the edits. Since Bob P. is on vacation, I am going hold off a bit and try to develop some thoughts about what I feel are the over-arching problems with the SOW/WP. I see two major issues:

- 1) As is currently pointed out, the efforts seem directed toward validating preconceived conclusions; and
- 2) My opinion is that AECOM does not have the knowledge or talent to do what is necessary.

Number 1 has already been articulated. Number 2 is a thorny issue, but I believe my assessment is valid. I would also re-broach the contention that due to the complexity and politics surrounding Red Hill the only organization that can produce a model that won't be legally challenged is the USGS and that should be part of the discussion. I realize that we can't direct the Navy who to use, but it would save the Navy (and us) a lot of money and head ache if they would explore this possibility. I also realize that the HBWS is currently a client of the USGS. However, the USGS has a peer review/QA process that should resolve any conflict of interest.

Lastly Rich, I would take issue with your changes to Comment 2. It is the uncertainty about the regional, not the local, groundwater flow gradients that is the primary issue.

Thanks,  
Bob W.

---

**From:** Takaba, Richard R  
**Sent:** Thursday, September 8, 2016 6:22:16 PM  
**To:** Frazier, William Mark; Pallarino, Bob (Pallarino.Bob@epa.gov); Linder, Steven (Linder.Steven@epa.gov); Chang, Steven Y; Kwan, Roxanne S; Whittier, Robert  
**Cc:** Heu, Randall  
**Subject:** RE: RE: Section 6&7 Disapproval and comments (MF comment)

I went thru it and made some edits in revision mode. Select right pane viewing in Review mode. Also inserted some comments. Attached.

Mark, can you make your revisions on that too, thanks

Rich

---

**From:** Frazier, William Mark

**Sent:** Thursday, September 08, 2016 2:59 PM

**To:** Pallarino, Bob ([Pallarino.Bob@epa.gov](mailto:Pallarino.Bob@epa.gov)) <[Pallarino.Bob@epa.gov](mailto:Pallarino.Bob@epa.gov)>; Linder, Steven ([Linder.Steven@epa.gov](mailto:Linder.Steven@epa.gov)) <[Linder.Steven@epa.gov](mailto:Linder.Steven@epa.gov)>; Chang, Steven Y <[steven.chang@doh.hawaii.gov](mailto:steven.chang@doh.hawaii.gov)>; Kwan, Roxanne S <[roxanne.kwan@doh.hawaii.gov](mailto:roxanne.kwan@doh.hawaii.gov)>; Takaba, Richard R <[richard.takaba@doh.hawaii.gov](mailto:richard.takaba@doh.hawaii.gov)>; Whittier, Robert <[Robert.Whittier@doh.hawaii.gov](mailto:Robert.Whittier@doh.hawaii.gov)>

**Subject:** RE: Section 6&7 Disapproval and comments (MF comment)

My suggestion to replace paragraph 3 on the front page:

As mentioned in paragraph 2 of this letter, the Navy needs to make a greater effort to gather and evaluate existing (historical) data and include the findings in a Conceptual Site Model (CSM). To address that deficiency, we require the Navy to do the following:

1. Comprehensively gather historical and current data such as reports, BLOGS, figures, photos, diagrams, cross-sections and tables from various geologic, engineering and hydrogeologic disciplines and from all relevant data sources such as the Board of Water Supply, USGS, Navy archives, University of Hawaii and others for the Red Hill study area (as per Fig 1 of the SOW).
2. Create a CSM that identifies the findings & location of the historical information. The CSM should be consistent with the State of Hawaii TGM guidelines; should have data analysis presented graphically in cross sections, maps and figures; should provide copies of the data and fully reference each source; and should present what is known, what is presumed (best professional opinion) and where known or suspected data gaps exist.
3. Add new or more current data that has been gathered as part of ongoing investigation and have the Navy keep it updated as more information is obtained.

Regards

--

Mark Frazier  
Geologist  
Underground Injection Control  
Safe Drinking Water Branch  
State of Hawaii  
(808) 586-4258  
[william.frazier@doh.hawaii.gov](mailto:william.frazier@doh.hawaii.gov)